### WATER RESOURCES ADVISORY COMMISSION

South Florida Water Management District Water Resources Advisory Commission Issues Workshop Initial Water Reservations & Lower East Coast Water Supply Plan Update B-1 Auditorium, SFWMD Headquarters Thursday, May 26, 2005

#### **TECHNICAL SESSION**

Attendees:

Barbara Powell Irene Quincey Patricia Camino Jennifer Jorge Bevin Beaudet Patrick Hayes Jim Brawnsen Patrick Martin Bob Chamberlain Rebecca Elliott Brian Shields Jim Jackson John Klochak Rick Smith Callie McMunigal Carlyn Kowalsky John Mulliken Sally Channon Cecile Ross Ken Ammon Steve Lamb Chip Merriam Kristen Bennett Tracy Robb Linda McCarty Teresa Coley Danna Ackerman-White Darrel Dunn Lynette Cardoch Walter Carson David Swift M. Smallwood Vic Engel Miguel Arroyo

Donna Fries Ed Kearns Paul Gray

Telephone Conference Call with Stakeholders from Fort Meyers, Florida.

### 1. Welcome and Introductions – Carlyn Kowalsky, Director, Water Supply Department

This workshop was convened at 9:05 am. Ms. Kowalsky invited comments during the presentations. Rick Smith welcomed stakeholders from the Fort Meyers Service Center attending via telephone and conducted introductions of stakeholder attendees, representatives of the SFWMD and of the Fort Meyers service attendees.

2. Why environmental targets are needed – John Mulliken, Director, Planning and Evaluation Division, Water Supply Department.

LEC Plan Update **Initial Reservations** Role of NSM

Mr. Mulliken explained how we have come to have these targets and performance measures. Clarified how we use performance measures utilizing modeling results and how we develop

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targets utilizing modeling results. Within the measurements there are targets. Question is how close are we today to the base targets?

Initial Reservation for an Estuary or Bay/existing water, environmental target The targets are the same, the results will be different.

Other models and sources of data have been used in lieu of NSM to develop target.

Patrick Hayes: NSM models have been developed utilizing scientific data. Over time as performance measures were reviewed, questioned, revised by historic data and other studies. Do performance measures have anything to do with system model. Can you give me an example of where the natural system performance was altered?

If stakeholders disagree with best scientific judgment are we not going to reserve water for protection of fish and wildlife?

Mr. Mulliken: We have public and agency review periods. We have to work through process. No change without going through evaluation and bringing it back here.

Stakeholder: My client's concern is that water reservations be based on the best scientific data and not politics.

Comments and questions solicited from Fort Meyers' attendees who have received power point presentation from Dave Swift and other presentation material by fax.

# 3. Overview of updates to the Natural System Model (NSM) – Dr. Jayantha Obeysekera, Director, Office of Modeling.

Dr. Obeysekera began with an overview of meaning of NSM and use. Trying to give life through a modeling system. Comparison and relationship between NSM and 2x2 modeling. Three elements of modeling, model input, model source code and model output. Input and source code undergo periodic updates due. Updates to NSM to incorporate better science and better data. Overview of NSM releases and data incorporated into upgrades.

Stakeholder: When looking at a history of 30 years or 40 years, are you picking up different areas that rain fell in?

Response: We only use the last 40 years of rainfall to drive that system.

Stakeholder: I was hoping for on your second slide – upper half of right side is a water shed – hoped to get a real sense of what rainfall driven means?

We do not calibrate small numbers and that is the reason why Loxahatchee was not included.

Where is the water going -800 sq mile water shed - where does the model show that water going?

NSM does show that there are flows into the Loxahatchee arm. Need more detailed information.

4. Overview of process to refine CERP performance measures and targets for the LEC Plan Update – Brenda Mills, Lead Planner, RECOVER, Ecosystems Restoration Department.

Point – performance measures number and duration of high events and low events and there is a time series that backs that up.

Explained graph not current.

Questions – none.

Mr. Mulliken pointed out additional handouts.

<u>5. Review of Proposed Performance Measures & Targets for Initial Water Reservations – Dave Swift, Project Manager, Planning and Evaluation Division, Water Supply Department.</u>

Time Series end up in graphical form to see how well we are moving toward our targets. Loxahatchee to be discussed at a future meeting. Table 4 use of NSM targets to drive initial reservations. In a couple of areas did not use NSM because biology did not make sense. Loxahatchee target is NSM-like/use a more rainfall driven model. Using time series to identify water reservations in the Everglades.

Explained use of NSM targets for formulation of salinity.

Stakeholder: There is a concern about using NSM pre-drainage system – concern they will reserve all existing extra water.

Mr. Milliken replied that we have a team working on that.

Question from Fort Meyers' attendees: Is the NSM model the same as the optimization model? Reply: No. The optimization model was developed independently and explained that methodology will be provided.

Fort Meyers' attendees: The numbers were not correct in the presentation and we would have to get them later – there was an old version in Brenda's bar chart.

Response: The graphic in Dave's presentation is correct.

Stakeholder: Re-reservations in the estuaries – though problem not low flows but highflows in very brief durations of time and does not see that addressed.

Mr. Swift gave an explanation.

Stakeholder: I agree but I don't see how we get to the target with the reservation. Reply: Look at Table 3 – Initial reservation is not designed to address future flows.

Comment: Table 3 does have an MFL reference of 35 but I do not see anything to do with MFL. Response: Always look at MFLs to see if we are having problems. MFLs are separate from CERP, not looking at Loxahatchee.

Question: Are you proposing to do reservations for the lake at sometime in the future. Up to 2008 lake not on list.

Modeling earlier of January of 2004, increased water available to lower east coast, Lake Okeechobee not affected.

### <u>6. Continued discussion on Existing Legal User Demands – Scott Burns, Director, Water Use</u> Regulation Division

Overview of current permits issued, calculation/considerations for permitted acreage.

Data to be posted on web site next Friday, review and be sure information appears to be correct for your particular interest.

Fort Meyers' attendees: On the web site – plan on the web site for the lower east coast is under section for reservations.

Public water supply systems are being updated.

Permitted water uses are in acres of each of the crop types, not volume.

Re-permit to Caloosahatchee basin since 2000?

There is a header sheet which explains which tab to use.

Maybe Rick could e-mail the group when the data is posted with a guide to area.

## 7. Update on Senate Bill 444 – Carlyn Kowalsky and Beth Ross, Sr. Specialist Attorney, Office of Counsel.

Law passed this past session for funding alternative water supply projects – new definition salt water brackish water, any other source designated as nontraditional. Emphasis in law – changes the way we have been doing things so far. Water supply plans will determine funding. In the future, the law contemplates having a list of projects to make up the water supply shortfall.

A \$30m split between the five districts?

No just this district – \$100m for all districts.

Comment: Definition for capital costs – but specific language in 444 requires it be construction only. Alternative water supply projects must be construction.

Lower East Coast water supply plan cannot be changed?

This will definitely have a big impact on how the lower east coast plan is written. Will impact all plans.

Fort Meyers' attendees: Does extend completion date. Extends deadlines for local governments to modify water supply plans.

When we will we see an updated model assumption table? Before the next meeting, July.

Statutory criteria are for the District to follow. Meeting with the Governing Board in Miami workshop to discuss all of this.

Fort Meyers will be faxing a sign-in sheet.

The workshop was adjourned at 11:23 a.m.

Karlyce T. Longmire, Recorder